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09/820,277	03/28/2001	Jerry A. Waldorf	SOFTECP.033A	1700

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EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3692

MAIL DATE	DELIVERY MODE
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12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/820,277

Applicant(s)

WALDORF ET AL.

Examiner

Susanna M. Diaz

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-62, 65-77 and 80-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52-62, 65-77 and 80-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This final Office action is responsive to Applicant's amendment filed October 9, 2007.

Claims 52, 53, 65, 66, 67, 68, 80, and 81 have been amended.

Claims 63, 64, 78, and 79 have been cancelled.

Claims 52-62, 65-77, and 80-95 are presented for examination.

Response to Arguments

2. Applicant's arguments filed October 9, 2007 have been fully considered but they are not persuasive.

Regarding the rejection under § 112, 2nd paragraph, Applicant submits:

...It is true that the current language does not specify whether the components are software or structural elements, but Applicants do not believe that such specification is needed (in fact, such a specification is not desired as the claims are intended to cover both hardware and software implementations). There is nothing in the statutes that requires specification of whether a component is a software or a structural element... (Page 18 of Applicant's response)

By Applicant's own admission, the recited components may be software *per se* (which merely amounts to a collection of software code). Then, to state that software *per se* comprises structural elements (as implied by the means-plus-function language) does not make sense. Since the components comprise the means-plus-function features, the components should at least impart structure themselves. This structure may also execute software; however, it should be clarified that the components

Art Unit: 3692

themselves are not merely software and also require at least some structural elements within the scope of each component.

Applicant's arguments regarding the art rejection address the claims, as amended. The Examiner will address these amendments in greater detail in the art rejection below.

Also, Examiner notes that, as per MPEP § 2144.03(C), the statements of Official Notice made in the art rejection have been established as admitted prior art since Applicant has not traversed the Examiner's assertions of Official Notice. More specifically, the following statements of Official Notice are now formally established on record as admitted prior art:

Official Notice is taken that it is old and well-known in the art of communications to translate messages of varying message formats into a common format that is then translated into a format understood by each respective message originator. This facilitates communications among a larger pool of systems.

Official Notice is taken that it is old and well-known in the art of data management to delete data that is no longer needed. This practice helps to conserve valuable memory space.

Official Notice is taken that it is old and well-known in the art of time management to measure an activity duration using a start and completion time corresponding to the activity.

Official Notice is also taken that it is old and well-known in the art of workflow management to track activity durations (e.g., in light of start and completion times) in

Art Unit: 3692

order to identify any activity delays or errors that may need to be addressed by the workflow manager in order to restore more efficient workflow operations.

Official Notice is taken that it is old and well-known in the art of workflow management to utilize flow charts to depict the various workflow activities. Such a practice facilitates a more conveniently accessed and viewed general overview of how a project comprises various activities and sub-activities and their respective interdependencies, thereby facilitating more efficient management and completion of the entire project.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 82-95 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The metes and bounds of the recited components are unclear. Do the recited components refer to software or structural elements? Applicant is reminded that apparatus claims are defined by the recited structural elements and corresponding functionality.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

6. Claims 52, 53, 60-62, 67, 68, 75-77, 82, and 91 are rejected under 35 U.S.C. 102(e) as being anticipated by Akifuji et al. (U.S. Patent No. 6,853,974).

Akifuji discloses a method, comprising:

[Claim 52] maintaining, in a first data store, information pertaining to a plurality of instances of a business process, wherein each of the instances of the business process comprises a plurality of activities that need to be performed, and wherein the activities are performed by activity components which are distributed across a network (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20);

storing a particular activity performance request in a second data store, which requests performance of a particular activity of a particular instance of the business process, wherein the second data store *can be* accessed by a particular activity component to retrieve the particular activity performance request, and wherein the second data store *can be* accessed by the particular activity component to store a particular message comprising activity performance information for the particular activity instance of the business process (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20; col. 7, lines 29-52 – As seen in col. 5, line 27 through col. 6, line 20, the status watcher alerts the workflow engine to any changes in workflow status. Records are read from the action/division definition table to determine which process is to be executed. As work is started and completed, its status is updated in a work-

Art Unit: 3692

specific object. The stored status changes and updates themselves are indicative of activity performance requests and related messages. Also noted is that the recited "can be" language only requires that the second data store be capable of performing the respective functionality following the recited occurrences of "can be"; therefore, this functionality is not explicitly required to be actively carried out within the scope of the claimed invention);

accessing the second data store to obtain the particular message therefrom (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20);

determining that the particular message pertains to the particular activity of the particular instance of the business process (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20); and

updating, in the first data store, information pertaining to the particular activity of the particular instance of the business process to reflect the activity performance information in the particular message (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20);

[Claim 53] wherein the second data store acts as a centralized request and message repository for enabling activity components distributed across a network to retrieve activity performance requests and to communicate information pertaining to performance of activities requested by the activity performance requests (col. 3, line 51 through col. 4, line 44; col. 5, line 27 through col. 6, line 20);

[Claim 60] wherein accessing the second data store comprises:

Art Unit: 3692

receiving an interrupt indicating that the second data store has been updated (col. 3, line 51 through col. 4, line 44; col. 5, lines 13-27; col. 7, lines 29-52); and

accessing the second data store in response to the interrupt (col. 3, line 51 through col. 4, line 44; col. 5, lines 13-27; col. 7, lines 29-52);

[Claim 61] wherein accessing the second data store comprises:

polling the second data store to determine whether the second data store has been updated with one or more messages from the activity components (col. 3, line 51 through col. 4, line 44; col. 5, lines 13-27; col. 7, lines 29-52); and

accessing the second data store in response to a determination that the second data store has been updated (col. 3, line 51 through col. 4, line 44; col. 5, lines 13-27; col. 7, lines 29-52);

[Claim 62] wherein the second data store comprises a database, and wherein accessing the second data store comprises:

submitting a query to the database (col. 3, line 51 through col. 4, line 44; col. 5, lines 13-27; col. 7, lines 29-52).

[Claims 67, 68, 75-77] Claims 67, 68, and 75-77 recite limitations already addressed by the rejection of claims 52, 53, and 60-62 above; therefore, the same rejection applies.

[Claims 82, 91] Claims 82 and 91 recite limitations already addressed by the rejection of claims 52, 53, and 60-62 above; therefore, the same rejection applies. It

Art Unit: 3692

should be noted that Akifuji tracks information for various interdependent activities, thereby addressing the various recited activities, requests, and messages.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 54-59, 65, 66, 69-74, 80, 81, 83-90, and 92-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akifuji et al. (U.S. Patent No. 6,853,974), as applied to claims 52, 53, 67, 68, 82, and 91 above, in view of Official Notice.

[Claims 54, 65] Akifuji does not expressly disclose that the activity components communicate using different message formats, and the method further comprises translating messages received from the activity components into a particular message format and storing the messages in the second data store in the particular message format. However, Official Notice is taken that it is old and well-known in the art of communications to translate messages of varying message formats into a common format that is then translated into a format understood by each respective message originator [now admitted prior art]. This facilitates communications among a larger pool of systems [now admitted prior art]. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Akifuji such that the activity components communicate using different message

Art Unit: 3692

formats, and the method further comprises translating messages received from the activity components into a particular message format and storing the messages in the second data store in the particular message format (claim 54) and wherein the activity components communicate using different message formats, wherein the activity performance requests are stored in the second data store in a particular message format, and wherein the method further comprises translating the activity performance requests into appropriate message formats for consumption by the activity components (claim 65) in order to facilitate communications among a larger pool of systems, thereby promoting greater versatility across a more diverse collection of workflow management systems.

[Claim 55] Akifuji does not expressly disclose the step of deleting the particular message from the second data store after the particular message has been obtained; however, Official Notice is taken that it is old and well-known in the art of data management to delete data that is no longer needed [now admitted prior art]. This practice helps to conserve valuable memory space [now admitted prior art]. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Akifuji to perform the step of deleting the particular message from the second data store after the particular message has been obtained in order to help conserve valuable memory space.

[Claims 56, 57, 58, 66] While Akifuji tracks the status of each activity using message updates (including that each activity has begun and that each activity has been completed), Akifuji does not expressly disclose that an activity start and completion *time*

Art Unit: 3692

are gathered. However, Official Notice is taken that it is old and well-known in the art of time management to measure an activity duration using a start and completion time corresponding to the activity [now admitted prior art]. Official Notice is also taken that it is old and well-known in the art of workflow management to track activity durations (e.g., in light of start and completion times) in order to identify any activity delays or errors that may need to be addressed by the workflow manager in order to restore more efficient workflow operations [now admitted prior art]. One of Akifuji's goals is to promote more efficient parallel processing of interrelated workflow activities while altering those dependent on certain activities if an issue arises that would needlessly cause the dependent activities to be re-performed once the issue is adequately addressed.

Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Akifuji such that updating the information pertaining to the particular activity comprises extracting an activity completion time from the particular message and storing the activity completion time in the first data store in association with the particular activity of the particular instance of the business process (claim 56) and Akifuji performs the step of assigning an activity start time to the particular activity of the particular instance of the business process and storing the activity start time in the first data store in association with the particular activity of the particular instance of the business process (claim 66) in order to facilitate more accurate measurement of activity duration time, thereby allowing a workflow manager to more efficiently identify any activity delays or errors that may need to be addressed by the workflow manager in order to restore more efficient workflow

Art Unit: 3692

operations. Further, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Akifuji such that the first data store comprises an activity start time associated with the particular activity of the particular instance of the business process, wherein the method further comprises computing, based upon the activity start time and the activity completion time, a duration of time required to complete the particular activity of the particular instance of the business process (claim 57) and comparing the duration of time required to complete the particular activity with a reference duration to determine whether the particular activity took longer than expected to complete (claim 58) in order to facilitate more accurate measurement of activity duration time, thereby allowing a workflow manager to more efficiently identify any activity delays or errors that may need to be addressed by the workflow manager in order to restore more efficient workflow operations.

[Claim 59] Akifuji discloses the use of a flow chart to illustrate the operation of a resource selector (Fig. 9; col. 9, lines 63-64), yet Akifuji does not expressly disclose that the particular instance of the business process comprises a plurality of activities including the particular activity, and wherein the method further comprises generating a flow diagram for the particular instance of the business process, wherein each activity of the particular instance is represented by a corresponding element, and wherein the particular activity is represented by a particular element and rendering, within the particular element or next to the particular element, an indication of the duration of time required to complete the particular activity. However, Official Notice is taken that it is

Art Unit: 3692

old and well-known in the art of workflow management to utilize flow charts to depict the various workflow activities [now admitted prior art]. Such a practice facilitates a more conveniently accessed and viewed general overview of how a project comprises various activities and sub-activities and their respective interdependencies, thereby facilitating more efficient management and completion of the entire project [now admitted prior art]. Since Akifuji is concerned with more efficiently managing various interdependent project activities (as seen in columns 1-2) and the modified version of Akifuji (discussed above) takes into account activity start and completion times, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Akifuji such that the particular instance of the business process comprises a plurality of activities including the particular activity, and wherein the method further comprises generating a flow diagram for the particular instance of the business process, wherein each activity of the particular instance is represented by a corresponding element, and wherein the particular activity is represented by a particular element and rendering, within the particular element or next to the particular element, an indication of the duration of time required to complete the particular activity in order to facilitate a more conveniently accessed and viewed general overview of how a project comprises various activities and sub-activities and their respective interdependencies, thereby facilitating more efficient management and completion of the entire project while encouraging more accurate measurement of activity duration time, thereby allowing a workflow manager to more efficiently identify any activity delays

Art Unit: 3692

or errors that may need to be addressed by the workflow manager in order to restore more efficient workflow operations.

Additionally (regarding claim 59), it should be noted that the “indication of the duration of time required to complete the particular activity” (as displayed within the flow diagram) is essentially non-functional, descriptive material since the specific type of data displayed does not alter any structure involved in the claimed invention nor does it result in a manipulative difference in the practice of the method. The recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability as the claimed invention fails to present a new and unobvious functional relationship between the descriptive material and the substrate, *see In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994)); *In re Ngai*, 367 F.3d 1336, 1336, 70 USPQ2d 1862, 1863-64 (Fed. Cir. 2004); MPEP § 2106.

[Claims 69-74, 80, 81] Claims 69-74, 80, and 81 recite limitations already addressed by the rejection of claims 54-59, 65, and 66 above; therefore, the same rejection applies.

[Claims 83-90, 92-95] Claims 83-90 and 92-95 recite limitations already addressed by the rejection of claims 54-59, 65, and 66 above; therefore, the same rejection

Art Unit: 3692

applies. It should be noted that Akifuji tracks information for various interdependent activities; therefore, the same analyses applied in the rejection of claims 54-59, 65, and 66 above also apply to the various recited activities, requests, and messages.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3692

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Susanna M. Diaz
Primary Examiner
Art Unit 3692

December 26, 2007